

REMARKS

This application has been carefully reviewed in light of the Office Action dated February 21, 2008. Claims 1-14 and 16 remain in this application. Claims 1, 6, 13, and 14 are the independent Claims. Claims 1, 6, 13, and 14 have been amended. New Claim 16 is added and finds support in Applicant's specification at page 8, line 31 to page 9, line 9. Claim 15 has been canceled without prejudice. It is believed that no new matter is involved in the amendments or arguments presented herein. Reconsideration and entrance of the amendment in the application are respectfully requested.

Interview Summary

Applicant thanks the Examiner for the courtesy extended in the telephone interview dated December 6, 2007. The independent Claims, as recited in the amendment dated December 6, 2007, were discussed with respect to the cited references. Agreement was reached that the amended independent Claims distinguished over the cited references.

Non-Art Based Rejections

Claims 1-5 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. In response, Applicant has amended Claim 1 to address the concern expressed in the Office Action by positively reciting the electrical power generating plan and electric power trading plan. Reconsideration and withdrawal of the above § 112 rejections are respectfully requested.

Art-Based Rejections

Claims 1-7, 9-11, and 13-14 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,021,402 (Takriti '402) in view of U.S. Patent No. 5,873,251 (lino) and "Linear and Nonlinear Modeling and Forecasting of Electric Power Loads", Oklahoma State University, July 1992 (Zhang); Claims 8 and 12 were rejected as obvious over Takriti '402 in view of lino, Zhang, and U.S. Patent No. 5,974,403 (Takriti '403). Applicant respectfully traverses the rejections and submits that the claims herein are patentable in light of the clarifying amendments above and the arguments below.

The Takriti '402 Reference

Takriti is directed to a Langrangian relaxation based stochastic model (see *Takriti '402; FIGs. 4 and 5*)

The lino Reference

lino is directed to an evaluation function J:

Evaluation function:

$$J = \max_{j=1}^{\max} \left[\sum_{i=1}^n (-\alpha_i \cdot u_i(k+j) + \alpha_c(k+j) \cdot E_{out}(k+j)) \right]$$

(see *lino; Col. 6, expression (9)*).

The Zhang Reference

Zhang is directed to electric power load forecasting based on an autoregressive-integrated moving average (ARIMA) and a mixed autoregressive-moving average model (ARMA) (see *Zhang; Page 3, 12, 21, and 121*).

The Takriti '403 Reference

Takriti '403 is directed to a computer for forecasting spot-market prices of electric power at different delivery points (see *Takriti '403; Abstract*).

The Claims are Patentable Over the Cited References

The present application is generally directed to a method, computer equipment, and computer program for planning electric power generation and trade.

As defined by amended independent Claim 1, in a planning system that makes plans of electric power generation and electric power trade, a computer implemented method for an electric power generating plan and an electrical power trading plan. The electric power generating plan and the electrical power trading plan are provided. The method includes the steps of determining a stochastic distribution of uncertain factors included in an expected balance generated from the electric power generating plan and the electric power trading plan based on an autoregressive moving average model of price. The stochastic distribution of uncertain factors is presented in a time-series form. The uncertain factors are prediction errors caused by annulment of the electric power trading plan.

The applied references do not disclose or suggest the features of the present invention as defined by amended independent Claim 1. In particular, the references do not disclose or suggest, "determining a stochastic distribution of uncertain factors included in an expected balance generated from said electric power generating plan and said electric power trading plan based on an autoregressive moving average model of price," as required by amended independent Claim 1.

Zhang is directed to electric power load forecasting based on an autoregressive-integrated moving average (ARIMA) and a mixed autoregressive-moving average model (ARMA) (see *Zhang; Page 3, 12, 21, and 121*). Zhang provides the moving average

models only for power load forecasting and fails to disclose or suggest using a moving average model for price forecasting.

In contrast, the present invention requires the determination of a stochastic distribution of uncertain factors based on an autoregressive moving average model of price. In this manner, a stochastic distribution including a fuel unit price based on a autoregressive moving average model is presented (See FIG. 6). This feature allows for the planning of electric power generation and trade, and especially to evaluating the power demands and cost-return balances and assists in making optimum plans for generator operations and electric power trade contracts (see Specification; Page 1, lines 7-12).

Thus, Zhang does not disclose or suggest this feature of the present invention as required by amended independent Claim 1. The ancillary references do not remedy the deficiencies of Zhang.

Since the applied references fail to disclose, teach, or suggest the above features recited in amended independent Claim 1, those references cannot be said to anticipate nor render obvious the invention which is the subject matter of that Claim.

Accordingly, amended independent Claim 1 is believed to be in condition for allowance and such allowance is respectfully requested.

Applicant respectfully submits that amended independent Claims 6, 13, and 14 are allowable for at least the same reasons as discussed above with reference to amended independent Claim 1 and such allowance is respectfully requested.

The remaining Claims depend either directly or indirectly from amended independent Claims 1, 6, 13, and 14 and recite additional features of the invention which are neither disclosed nor fairly suggested by the applied references and are therefore also believed to be in condition for allowance.

Appl. No. 10/697,451
Amdt. Dated April 22, 2008
Reply to Office Action of February 21, 2008

Attorney Docket No. 83394.0018
Customer No.: 26021

Conclusion

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 785-4721 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

Date: April 22, 2008

By: 
Dariush G. Adli
Registration No. 51,386
Attorney for Applicant(s)

1999 Avenue of the Stars, Suite 1400
Los Angeles, California 90067
Phone: 310-785-4600
Fax: 310-785-4601